

Hydrographic Investigations in the Iceland and Greenland Seas in late Winter 1971 – “Deep Water Project”

SVEND-AAGE MALMBERG

Marine Research Institute, Skúlagata 4, 101 Reykjavík

ABSTRACT

The paper gives a short description of and discussion on hydrographic investigations carried out in the Iceland and Greenland Seas in February 1971. The results obtained may be of interest in connection with the Deep Water Project of the International Council for the Exploration of the Sea (ICES) carried out in the eighties.

INTRODUCTION

In February 1971 hydrographic investigations were carried out in the Iceland and Greenland Seas on the Icelandic r/v Bjarni Sæmundsson. The purpose of these investigations was to study the late winter distribution of salinity in the East Icelandic Current northeast of Langanes (Malmberg 1972, 1980) and the Jan Mayen Polar Current northeast

of Jan Mayen. The observations were part of a study of ice conditions in the sea north of Iceland. The hydrographic conditions in the area in the Greenland Sea where deep or bottom water formation is supposed to take place were also investigated (Malmberg 1972). A report on these data is believed to be of interest now due to the so-called Deep Water Project in the Norwegian, Greenland and Iceland Seas carried out by some member countries of ICES in the eighties (Anon. 1980). These data were used in the planning stage by the Working Group on Oceanic Hydrographic together with a XBT section between Northeast Iceland and Spitzbergen carried out in August 1972 (Fig. 1). The cyclonic current systems and the different water masses in the Iceland and Greenland Seas are indicated in this XBT section.

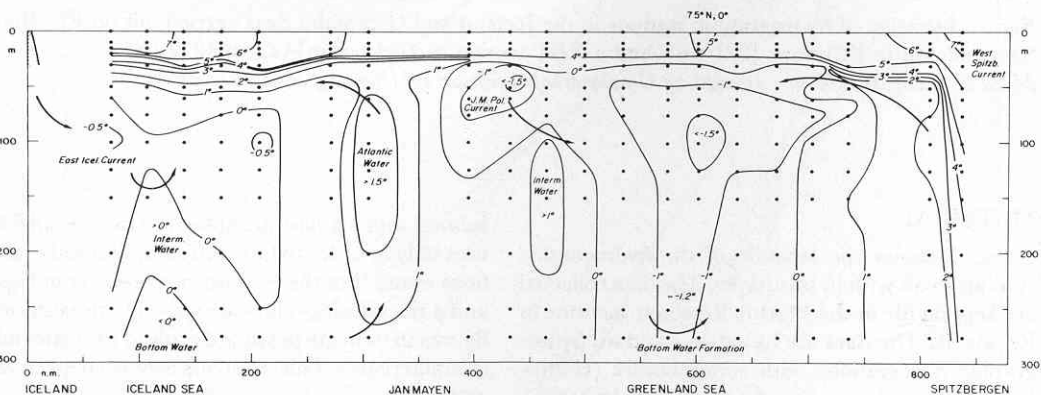


Fig.1. Temperature distribution in a XBT section from Iceland to Spitsbergen. R/v Bjarni Sæmundsson in August 1972. The cyclonic current systems and the different water masses in the Iceland and Greenland Seas are indicated. For location see Fig. 2.

Mynd 1. Lóðrétt snið hitastigs frá Íslandi til Spitsbergen í ágúst 1972. Sjógerðir og rangsælis straumar í Íslands- og Grænlandshafi eru einnig sýnd.